

Open Textbook Libraries: You're Free Gateway to Education

Ashwini Shinde

Abstract:

Open Textbook Libraries represent a transformative approach to education by providing free, openly licensed, and high-quality academic resources to students, educators, and the public. As part of the broader Open Educational Resources (OER) movement, these libraries eliminate financial barriers associated with traditional textbooks and promote equitable access to knowledge. Through open licenses, particularly Creative Commons, users are granted the flexibility to retain, reuse, revise, remix, and redistribute content, enabling greater customization and pedagogical innovation. Platforms such as the Open Textbook Library play a critical role in curating peer-reviewed materials and supporting educators in adopting adaptable learning resources. Furthermore, large-scale national initiatives like India's NDLI and DIKSHA demonstrate how open textbook frameworks can be integrated into digital education ecosystems to support multilingualism and inclusive learning. Overall, Open Textbook Libraries contribute significantly to the development of an open knowledge system by democratizing access, enhancing educational quality, and fostering global knowledge sharing.

Open textbook libraries are online collections or repositories of educational books that are **freely accessible, openly licensed, and available for free use, adaptation, and distribution**. These libraries act as centralized places where students, faculty, and the public can find peer-reviewed, openly licensed textbooks covering various academic subjects. They support the broader Open Educational Resources (OER) movement, which aims to make educational materials more affordable and accessible.

Key Aspects of Open Textbook Libraries

- **Free and Accessible:** They significantly reduce the cost of textbooks for students, promoting affordability and educational equity.

- **Openly Licensed:** Textbooks are published under open licenses, typically **Creative Commons (CC)**, allowing users to retain, reuse, revise, remix, and redistribute the content freely
- **Quality Content:** The gathered textbooks are written by experts and are often **peer-reviewed** to ensure quality
- **Formats:** They typically include textbooks in digital forms such as print, e-book, or audio formats.

The Open Textbook Library Example

The **Open Textbook Library** is a prominent example, created by the University of Minnesota's Open Education Network:

- **Origin:** It was founded in **2012 by David Ernst**, a faculty member at the University of Minnesota, to help faculty locate and adopt peer-reviewed, openly licensed textbooks.
- **Purpose:** The original intent was to create a centralized place for faculty to find open textbooks.
- **Licensing Preference:** While it accepts various CC licenses, it **recommends and favors the CC BY (Attribution) license** to facilitate the broadest use, adaptation, and sharing. The library **excludes licenses with No Derivatives (ND)** clauses because they restrict the ability to revise or remix the content, which goes against open education principles.

Importance and Function














Open textbook libraries are important because they:

- **Reduce Costs:** They provide free, accessible educational resources, lowering financial barriers for students.
- **Support Educators:** They allow educators to customize and adapt content to fit their teaching needs.
- **Promote Equity:** They contribute to educational equity by making learning materials available to underserved populations worldwide.

The operational model for these initiatives often relies on funding from **grants or institutional support** rather than sales revenue, allowing the textbooks to be freely available to everyone.

Creative Commons symbols

creativcommons symbols

			
ATTRIBUTION credit the author	COPYRIGHT All rights reserved	PUBLIC DOMAIN No rights reserved	CREATIVE COMMONS Some rights reserved
			
COMMERCIAL	NONCOMMERCIAL Don't make money	PUBLIC DOMAIN	SHARE ALIKE
			
DERIVATIVE WORKS	REGISTERED	COPYRIGHT of audio works	SHARE ALIKE
	SM	TM	
SERVICE MARK	SERVICE MARK that has not been registered yet	TRADE MARK that has not been registered yet	

What Defines an Open Textbook?

An open textbook is a course material—a textbook—that is made available online to be freely used, adapted, and distributed by students, teachers, and the public.³ The defining difference lies in their **copyright permissions**.

- **Open License:** Open textbooks are typically licensed under an **open license**, such as a Creative Commons (CC) license (e.g., CC BY, CC BY-SA). This license grants specific usage rights to the public, provided the original author is attributed.
- **The 5R Permissions:** These licenses grant users rights often summarized as the "5Rs," which include the right to:
 1. **Retain** the material (make, own, and control copies).
 2. **Reuse** the material (use it in a wide range of ways)
 3. **Revise** the material (adapt, modify, and improve it).
 4. **Remix** the material (combine it with other resources).
 5. **Redistribute** the material (share copies with others).

This flexibility means open textbooks can be downloaded, printed at low cost, and accessed in various digital formats without the technological restrictions (Digital Rights Management

Key Benefits of Open Textbooks

Open textbooks offer significant advantages for students, faculty, and institutions:

Affordability and Equity: This is the most cited benefit. By eliminating the high cost of commercial textbooks, open textbooks ensure students have equitable access to required learning materials on the first day of class. Studies have consistently shown that high textbook costs lead a significant number of students to delay purchasing, or simply forgo, the required texts, which negatively impacts their academic success.

Flexibility and Customization: Faculty members can **adapt, revise, and remix** the content to perfectly align with their specific curriculum, teaching style, and local context. This allows for tailoring textbooks to include diverse perspectives, local case studies, or to update information rapidly—something nearly impossible with static commercial textbooks.

Improved Student Experience: Students benefit from immediate, perpetual access to their materials. They can download, highlight, and print sections freely, leading to a more accessible and engaging learning experience.

Rapid Updates: Unlike commercial texts that may go years between costly editions, open textbooks can be updated much more frequently to reflect new research, current events, or changes in the field, ensuring the content is always relevant.

The Role of Open Textbook Libraries

Platforms like the **Open Textbook Library**—supported by organizations like the Open Education Network—are critical infrastructure for the movement.¹ These libraries curate, host, and promote high-quality, peer-reviewed open textbooks across a wide range of subjects.

They serve as the central point for faculty to discover, evaluate, and adopt open textbooks for their courses, effectively making them publishers and distributors of free learning resources

Open Textbook Library's Support for Open Knowledge

The Open Textbook Library, supported by the Open Education Network (OEN), contributes to the open knowledge system in three main ways: **Access**, **Curation**, and **Adaptability**

Open Textbook Library (OTL) is a crucial component of the **Open Knowledge System**, specifically as a leading platform for **Open Educational Resources (OER)**.

It fundamentally supports the open knowledge system by removing **financial and legal barriers** to accessing, reusing, and adapting academic material.

Promoting Free and Equitable Access (The "Open" Principle)

The OTL's primary contribution is to the principle of **free access to knowledge**—the core tenet of the open knowledge movement.

- **Financial Barrier Removal:** The library hosts or provides links to textbooks that are entirely **free** for students, faculty, and the general public to download and use. This directly addresses the crisis of high textbook costs, ensuring that economic status does not determine access to essential learning material.
 - **Open Licensing:** All included textbooks are licensed under an **open license**, usually a Creative Commons (CC) license (e.g., CC BY, CC BY-SA). This legal framework is what makes the resources truly "open," allowing anyone to **retain, reuse, revise, remix, and redistribute** the content without seeking special permission. This aligns with the "gratis" (free of charge) and "libre" (free of restrictions) aspects of open access.
-

Curating and Quality-Assuring Resources

For knowledge to be truly useful and trustworthy, it must be reliable. The OTL's function as a curated library supports the quality and discovery of open knowledge.

- **Centralized Discovery:** The OTL acts as a centralized **referatory** (a point of reference and discovery) for open textbooks from various authors and publishers. This makes it far easier for educators to **find and adopt** high-quality OER, reducing search time and promoting widespread use.
 - **Faculty Peer Review:** To address concerns about quality, the OTL organizes a robust system of **faculty-led reviews**. Faculty members in the relevant subject area are invited to assess the textbooks, providing valuable, public feedback on content accuracy, comprehensiveness, and clarity. This quality control mechanism is essential for building trust in the open knowledge ecosystem.
-

Fostering Adaptability and Pedagogical Innovation

Open knowledge isn't just about reading; it's about **using and building** upon existing work. The OTL enables this through its content licenses.

- **Local Relevance:** The ability to **revise** and **remix** the open textbooks allows instructors to tailor the materials to their specific course objectives, update outdated information immediately, or insert locally relevant examples and case studies. This improves the **cultural relevance and effectiveness** of the materials, which is key to advancing teaching and learning.
- **Creating New Knowledge:** By encouraging faculty to author, adapt, and submit new open textbooks, the OTL and the OER movement **democratize the**

creation of scholarly content, moving the process away from a few major commercial publishers and into the hands of a broader academic community.

In essence, the Open Textbook Library serves as a vital **engine for the Open Educational Resources (OER) ecosystem**, which itself is a foundational pillar of the larger movement toward an **Open Knowledge System**.

Global Case Study: Open Textbooks in South Asian Education Policy

The analysis of OER adoption at the national level reveals sophisticated models of government-backed digital education infrastructure, particularly in South Asia. The scale and policy objectives of initiatives in India serve as a benchmark for achieving educational equity through OER.

The Indian National Strategy: Scale and Multilingualism

India's OER initiatives are characterized by high-level government support, focusing on expanding resources across all academic levels, from K-12 to university research.

- **National Digital Library of India (NDLI):** The NDLI is a vast, centralized digital repository that aggregates content from both national and international sources, providing access to over 100 million educational items.⁷ Its scope is exhaustive, covering books, articles, theses (via Shodhganga), audio-video lectures, and OERs across all disciplines.
- **Multilingual Equity:** A core strategic component of the NDLI is its commitment to linguistic diversity. The platform provides resources in 39 Indian languages and supports a total of 452 languages, ensuring that educational materials are accessible to a broad audience regardless of regional language.
- **Open Architecture:** The NDLI is constructed using open architecture standards, open-source software, and open metadata formats, guaranteeing universal reach and facilitating long-term preservation and integration. The NDLI Club platform further promotes OER awareness and utilization through activity-based learning and institutional networking.

The prioritization of linguistic diversity at this massive scale demonstrates how national OER policy can effectively integrate digital technology with sociolinguistic necessity, establishing OER not just as a cost-saver but as global infrastructure for multilingual equity.

Platformization of School Education: DIKSHA

The national strategy in India demonstrates an evolution from static repositories to integrated, dynamic educational platforms.

- **Transition from Repository:** The National Repository of Open Educational Resources (NROER), launched in 2013, hosted extensive educational resources for Primary, Secondary, and Senior Secondary classes in various formats (Video, Image, Document, Flip book). However, NROER is now considered inactive.
- **DIKSHA (Digital Infrastructure for Knowledge Sharing):** Launched in 2017, DIKSHA, guided by the Ministry of Education, is the dedicated nationwide platform for school education. It is utilized by virtually every state, union territory, and national board, including CBSE and NCERT.⁷ DIKSHA supports 36 Indian languages and is crucial for supporting e-learning, content curation, and teacher professional development, integrating with other platforms like e-Pathshala.
- **Focus on Ecosystems:** This shift from NROER to DIKSHA illustrates a policy trend favoring comprehensive digital ecosystems over passive content archives. The new infrastructure integrates OER directly with curriculum alignment and professional development, as exemplified by resources like TESS-India OER, which provides teacher development units for elementary and secondary subjects. This commitment to integrated infrastructure ensures that OER adoption is supported by robust mechanisms for utilization and content localization.

Open textbook libraries serve as centralized digital repositories that provide **unrestricted access** to peer-reviewed academic materials, eliminating the financial hurdles associated with traditional publishing. These platforms utilise **open licensing**, such as Creative Commons, to empower educators and students to **retain, modify, and distribute** content to suit specific pedagogical needs. By supporting the **5R permissions**, these resources foster a more **equitable and inclusive** learning environment where information can be updated rapidly and tailored to diverse cultural contexts. Beyond individual repositories, national initiatives like India's **DIKSHA and NDLI** demonstrate how government-backed infrastructure can scale these principles to support **multilingualism** and nationwide digital education. Ultimately, these libraries represent a fundamental shift toward an **Open Knowledge System** that democratises the creation and sharing of scholarly works.

Keywords:

Open Textbook Libraries, Open Educational Resources (OER), Creative Commons, Educational Equity, Digital Learning, Open Knowledge System, NDLI, DIKSHA, Multilingual Education,

References-

<https://open.umn.edu/opentextbooks>

<https://open.umn.edu/oen>

<https://www.ndl.gov.in/>

<https://www.unesco.org/en/dtc-financing-toolkit/diksha>

<https://pmevidya.education.gov.in/diksha.html>

<https://services.india.gov.in/service/detail/national-repository-of-open-educational-resources-by-ministry-of-education>